

Issuance Date: July 27, 2005
Effective Date: August 1, 2005
Expiration Date: August 1, 2010

AIR OPERATING PERMIT 000085-0

(File: simaop12f.DOC)

In compliance with the provisions of The State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

Simpson Tacoma Kraft Company, LLC
801 Portland Avenue
Tacoma, Washington 98421

is authorized to operate in accordance
with the terms and conditions
of this permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P.O. Box 47600
Olympia, Washington 98504-7600

Carol Kraege, P.E.
Industrial Section Manager

Marc Heffner, P.E.
Environmental Engineer

TABLE OF CONTENTS

INTRODUCTION AND LEGAL AUTHORITY.....	3
EMISSION UNIT SPECIFIC REQUIREMENTS [WAC 173-401-600].....	3
A. RECOVERY FURNACE # 4	3
B. LIME KILN #s 1 & 2.....	7
C. SMELT TANK #s 4E & 4W.....	8
D. POWER BOILER # 6	9
E. POWER BOILER # 7	10
F. CAUSTICIZER SLAKER VENT	12
G. DIGESTER, MULTIPLE-EFFECTS EVAPORATORS, & CONDENSATE STRIPPER SYSTEM	12
H. INDUSTRIAL STACK SOURCES	12
I. COMPLIANCE ASSURANCE MONITORING (CAM).....	12
J. NESHAP SSM PLAN, RECORDKEEPING, AND REPORTING.....	14
K. LOW VOLUME HIGH CONCENTRATION (LVHC) SYSTEM.....	16
L. PULPING PROCESS CONDENSATES	19
M. BLEACHING SYSTEM	21
N. HIGH VOLUME LOW CONCENTRATION (HVLC) SYSTEM.....	23
O. POWER BOILER MACT	25
FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600].....	26
MONITORING, RECORDKEEPING & REPORTING	28
STANDARD TERMS & CONDITIONS	32
PERMIT SHIELD.....	34
APPENDIX A - PERMIT SHIELD/ INAPPLICABLE REQUIREMENTS.....	34
APPENDIX B - CONTINUOUS MONITORING RECOVERY REQUIREMENTS	38
APPENDIX C - PM-10 CALCULATIONS	39
APPENDIX D - #2 LIME KILN TRS AND SO ₂ METHOD.....	41
APPENDIX F - EXISTING ORDERS AND PERMITS.....	44

INTRODUCTION AND LEGAL AUTHORITY

This Air Operating Permit is authorized under the Operating Permit Regulation, Chapter 173-401 WAC. The provisions of this permit describe the emissions limitations, operating requirements, monitoring and recording requirements, and reporting frequencies for the permitted source.

Simpson Tacoma Kraft Company requires a Title V Air Operating Permit because it emits or has the potential to emit, one hundred tons per year or more of one or more air pollutants [WAC 173-401-300(1)].

Compliance with underlying requirements shall be demonstrated using the methods specified in this permit. The permittee shall submit a report of compliance certification of the terms and conditions contained in this permit as required in the General Condition 35, including certification of compliance with all applicable requirements.

The Title V Air Operating Permit consists of all parts of this assembled document including all Appendices, but does not include the accompanying Support Document, nor the Title V permit application materials submitted by Simpson, nor any other past orders or permits.

The definition of terms contained in WAC 173-401-200, and as defined in all referenced regulations, apply to this permit unless otherwise defined in the permit. All terms and conditions except state-only requirements are enforceable under the Federal Clean Air Act (FCAA). State-only requirements are specifically identified in the permit.

EMISSION UNIT SPECIFIC REQUIREMENTS [WAC 173-401-600]

The emission units covered by conditions A through O are subject to the following emission limits, and monitoring and reporting requirements. These units are also subject to the facility-wide applicable requirements and the associated monitoring, recordkeeping and reporting requirements for these limits in the Facility-Wide section of this permit. The permittee may use an equivalent method with prior written approval from Ecology. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed in conditions A through O is WAC 173-401-615 or 630(1).

Insignificant emission units (IEUs) are subject to the applicable requirements contained in the Facility-Wide section, however they are not subject to testing, monitoring, recordkeeping, reporting or certification requirements unless the generally applicable requirements in the State Implementation Plan (SIP) impose them [WAC 173-401-530(2)(c)].

The reference test method (RM) or compliance determination algorithm is identified in the column titled "Monitoring and Reporting". These algorithms set forth the manner by which emissions are calculated for those requirements for which the Reference Method itself does not directly result in an emissions estimate. The permittee may use an equivalent method with prior written approval from Ecology.

A. RECOVERY FURNACE # 4

Simpson shall comply with the applicable requirements of 40 CFR 60 Subparts A and BB for Recovery Furnace No. 4, which include the following general requirements:

- 40 CFR 60.7(b) & (f) concerning record keeping,
- 40 CFR 60.7(c), (d), & (e) concerning reporting,
- 40 CFR 60.11(d) concerning operation and maintenance,
- 40 CFR 60.12 concerning concealment,
- 40 CFR 60.13 concerning monitoring, and
- 40 CFR 60.19 concerning notification and reporting.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.1	Particulate	0.044 gr/dscf @ 8% O ₂ , one hour average.	EPA Method 5 is the reference test method. The permittee shall source test quarterly if 6 consecutive monthly source tests results are all below 75% of the emissions limitation. If any single test result exceeds 75% of the limitation, source testing shall revert to a monthly frequency until 6 consecutive monthly source test results are all below 75% of the limitation. Sampling shall follow EPA Method 5 except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests. Report test results monthly. (See Condition A.9 for surrogate monitoring necessary to satisfy CAM requirements.)	40 CFR 60.282(a)(1)(i) and Order No. 99AQIS-94.
		0.10 gr/dscf @ 8% O ₂ , one hour average.	Same as for previous limit.	WAC 173-405-040(1)(a).
A.2	SO ₂	150 ppm @ 8% O ₂ , 30-day rolling average.	EPA Method 6 is the reference test method. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60 (July 1, 1992), App. F and App. B, Perf. Spec. 2. See 1&4 in appendix B for data recovery requirements. Report 30-day averages and excess emissions monthly.	Order No. 01AQIS-3114 (BACT limit).
		500 ppm @ 8% O ₂ , hourly average.	Same monitoring as for previous limit. Report hour maximum in the monthly report.	WAC 173-405-040(11)(a).
		669 tons/year as 12-month rolling total.	Report 12-month rolling total monthly.	Order No. DE 01AQIS-3114 (limit makes potential to emit assumptions enforceable).
A.3	Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period.	DOE Test Method 9B is the reference test method. Monitor continuously using COM that conforms to 40 CFR Part 60, App B, Perf. Spec. 1. See 1&4 in appendix B for data recovery requirements. Report periods of excess emissions monthly.	WAC 173-405-040(6) for limit. Order No. DE 97AQ-I004 for limit and monitoring.
		(when firing only black liquor) Average 35% for more than 6 consecutive minutes in any 60 minute period.	Same as for previous limit. See 1&3 in appendix B for data recovery requirements. If the total number of contiguous periods of excess emissions in a quarter is less than six percent of the total number of operating hours (excluding startup, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement.	40CFR 60.282(a)(1)(ii) for the opacity limit. 40 CFR 60.284(a)(1) for COM operational parameters. 40 CFR 60.284(d), (e) for reporting requirements and excess emission allowance.
		(when firing or co-firing oil) Average 20% for more than 6 consecutive minutes in any 60 minute period except for one 6-minute period per hour of not more than 27 % and except during SSM periods.	Same as for first opacity limit. See 1&3 in appendix B for data recovery requirements. Maintain records of when oil is fired or co-fired. Report periods of excess emissions monthly.	40 CFR 60.43b(f) & (g) for the opacity limit. 40 CFR 60.48b(a) for COM requirement. 40 CFR 60.49b(h)(i) for reporting. 40 CFR 60.13 for COM operational requirements.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.4	NOx	85 ppm @ 8 % O ₂ , 30-day rolling avg.	EPA Methods 7, 7A, 7B, or 7E are the reference test methods. Monitor ongoing compliance continuously using a CEM conforming to 40 CFR 60, App. F and App. B, Perf. Spec. 2. See 1&4 in appendix B for data recovery requirements. Report daily averages for the month and excess emissions monthly.	Order No. 99AQIS-94 (BACT limit).
		515 tons/year as 12-month rolling total	Calculate NOx mass emissions using the algorithm in condition A.5. Report 12-month rolling total monthly.	Order No. DE 01AQIS-3114 (limit makes potential to emit assumptions enforceable) and Order No. 1916-AQ05.
		Maintain annual oil capacity factor <10% so that 40 CFR 60.44b NOx limit not applicable.	Maintain records of black liquor and oil firing rate. Assume heat inputs of: 6000 Btu/lb BLS (H _{BLS}), and 18,000 Btu/lb of residual fuel oil (H _O). Cap Factor(%) = (lb oil fired/year)(H _O)(100) / [1.1(142,080 lb BLS/hr)(H _{BLS})(8760 hr/year)]. Report 12-month rolling average oil capacity factor monthly.	Order No. 99AQIS-94, Order No. 1916-AQ05, and 40 CFR 60.44b(c) for capacity factor limit. 40 CFR 60.49b(d) for reporting requirements.
A.5	<p><u>NOx mass emissions algorithm:</u></p> <p>NOx (ton) =</p> $\frac{3.41 \times 10^6 \text{ lb BLS}}{\text{day}} \times \text{days of operation} \times \frac{87.5 \text{ DSCF @ } 8\% \text{ O}_2^*}{\text{lb BLS}} \times \text{ave NOx (ppm @ } 8\% \text{ O}_2) \times \frac{46 \text{ lb NOx}}{385 \text{ dscf NOx}} \times \frac{\text{ton NOx}}{2000 \text{ lb NOx}}$ <p>* $\frac{87.5 \text{ DSCF @ } 8\% \text{ O}_2}{\text{lb BLS}} = \text{F factor} \times \text{HHV} \times \text{O}_2 \text{ correction}$</p> <p>-----</p> <p>F factor = 9000 DSCF/million Btu @0% O₂ HHV = 6000 Btu/lb BLS O₂ correction factor = (20.9)/(20.9-8)</p> <p>Reference: NCASI Technical Bulletin No. 646, pg. 16. [Order #1916-AQ05].</p>			
A.6	CO	400 ppm @ 8% O ₂ , 30-day rolling average.	EPA Methods 10, 10A, or 10B are the reference test methods. Monitor continuously using an approved CEM that conforms to 40 CFR Pt. 60 (July 1, 1992), App. F and App. B, Perf. Spec. 4. See 1&4 in appendix B for data recovery requirements. Report 30-day averages and excess emissions monthly.	Order No. 01AQIS-3114 (BACT limit).
		1672 tons/year as 12-month rolling total.	Report 12-month rolling total monthly.	Order No. 01AQIS-3114 (limit makes potential to emit assumptions enforceable).
A.7	VOC	0.50 lb/ton BLS.	Sample twice per year using EPA Method 25A or equivalent. Use the average of 3 one-hour runs. Report results with next monthly report.	Order No. 01AQIS-3114 (BACT limit).

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.8	TRS	5 ppm by volume on a dry basis, corrected to 8 % O ₂ , 12 hr average.	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5. See 1&3 in appendix B for data recovery requirements. Record 12-hour average concentration for two consecutive 12-hour periods each day. If the total number of contiguous periods of excess emissions in a quarter is less than one percent of the total number of operating hours (excluding periods of startup, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement (40 CFR 60.11(d)).	40 CFR 60.283(a)(2) for basis of limit. 40 CFR 60.284(a)(2) and 40 CFR 60.284(e)(1)(i) for basis of monitoring. 40 CFR 60.284(c)(1) for reporting.
A.9	HAPs	Particulate surrogate: 0.044 gr/dscf @ 8% O ₂ (see condition A.9a)	Monitor opacity with a continuous opacity monitor meeting the requirements of 40 CFR 63.6(h) and 63.8. See 1&2 in appendix B for data recovery requirements. Begin corrective action, as specified in the SSM plan (see condition A.10), when an exceedence occurs (the average of any 10 consecutive 6-minute averages exceed 20%). A violation occurs when opacity exceeds 35% for ≥ 6% of the operating time during a quarter, not including applicable periods of startup, shutdown, or malfunction. Report time, date, average opacity, and corrective action for exceedences monthly; and report violations quarterly.	40 CFR 63.862(a)(i) for limit; 40 CFR 63.864(d) for monitoring; 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for number of exceedences per period. 40 CFR 63.6(h) for SSM exclusion.

A.9a If a source test exceeds the particulate surrogate concentration listed in condition A.9, Simpson may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from LK #1, RF #4, and smelt tank #s 4E & 4W for the same month, if available, or most recent source test data, if data from the same month is not available.

A.10 SSM Plan [40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)]
 Simpson shall comply with the SSM plan requirements identified in section J of this AOP.

The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.11	TRS	5 ppm @ 8% O ₂ , daily average.	Monitor same as A.8, except report daily average of test results monthly.	WAC 173-405-040(1)(c).

A.12 The permittee may not fire Recovery Furnace No. 4 with Kraft mill black liquor when both sides of the recovery furnace precipitator are out of service at the same time. The permittee shall monitor and record the time and duration when both sides of the precipitator are out of service at the same time, and maintain facility operation records showing that the firing limitation was followed. All violations will be reported in the most immediate monthly report. [Order DE 97AQ-1004]

B. LIME KILN #s 1 & 2

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.1	Particulate	0.13 gr/dscf @ 10% O ₂ , one hour average.	EPA Method 5 or DOE Method 8 is the reference test method. The permittee shall perform source testing quarterly if 6 consecutive monthly source tests results are all below 75% of the emissions limitation. If any single test result exceeds 75% of the limitation, source testing shall revert to a monthly frequency until 6 consecutive monthly source test results are all below 75% of the limitation. Sampling shall follow the method except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests. Report test results monthly. (See Condition B.4 for surrogate monitoring necessary to satisfy CAM requirements.)	Order No.97AQ-I004 and Order No. 1916-AQ05 WAC 173-405-040(3)(a) for particulate limit. WAC 173-405-040(10) for O&M requirements.
B.2	SO ₂	500ppm @ 10% O ₂ , hourly average.	EPA method 6c is the reference test method. The permittee shall perform a one-hour source test monthly and report test results monthly. In lieu of a source test, the highest hourly average for the month from a properly calibrated CEMS may be reported. For LK #2: Simpson may use the method "#2 Lime Kiln Continuous SO ₂ Source Test Method" included in appendix D of this AOP, provided that #2 Lime Kiln processes lime mud ≤20% of the time on a calendar year basis. While this test method is in use, annual #2 Lime Kiln percent use shall be calculated and submitted with the monthly air report for December. If annual use is >20%, EPA Method 6c shall be used for all subsequent tests.	WAC 173-405-040(11)(a) and Order No. 1916-AQ05.
B.3	Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period.	DOE Test Method 9B is the reference test method. See Condition B.4 for opacity monitoring and reporting requirements.	Order No.97AQ-I004 and WAC 173-405-040(6).
B.4	HAPs	Particulate surrogate: 0.15 g/dscm (0.064 gr/dscf) @ 10% O ₂ (see condition B.4a)	For LK #1: Maintain pressure drop ≥19 inches of water column and scrubber flow ≥273 gpm. For LK #2: Maintain pressure drop ≥29 inches of water column and scrubber flow ≥252 gpm. For LK #s 1&2: Continuously monitor pressure drop and scrubber flow. Begin corrective action, as specified in the SSM plan (see condition B.5), when an exceedence occurs (any 3-hr average out of compliance with pressure drop or scrubber flow requirements). A violation occurs when 6 or more 3-hr averages are out of compliance with pressure drop or scrubber flow requirements during a 6 month reporting period (not including applicable periods of startup, shutdown, or malfunction). For the purpose of determining the number of nonopacity exceedences, no more than one exceedence can occur per 24 hour period. Report exceedences monthly, and violations every 6 months.	40 CFR 63.862(a)(i) for limit; 40 CFR 63.864(e) for monitoring; 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for number of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.

B.4a For LK #1 only: If a source test exceeds the particulate surrogate concentration listed in condition B.4, Simpson may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from LK #1, RF #4, and smelt tank #s 4E & 4W for the same month, if available, or most recent source test data, if data from the same month is not available.

B.5 SSM Plan [40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)]
 Simpson shall comply with the SSM plan requirements identified in section J of this AOP.

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.6	TRS	20 ppm @ 10% O ₂ , daily average.	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. B, Perf. Spec. 5. See 1&4 in appendix B for data recovery requirements. Report daily averages and excursions monthly. For LK #2: Simpson may use the method "#2 Lime Kiln Continuous TRS Emissions Monitoring System" included in appendix D of this AOP, provided that #2 Lime Kiln processes lime mud ≤20% of the time on a calendar year basis. While this test method is in use, annual #2 Lime Kiln percent use shall be calculated and submitted with the monthly air report for December. If annual use is >20%, 40 CFR 60, App. B, Perf. Spec. 5 shall be used for all subsequent monitoring.	Order No.97AQ-I004, Order No. 1916-AQ05, and WAC 173-405-040(3)(b).
		80 ppm @ 10% O ₂ , 2 hr average.	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. B, Perf. Spec. 5. See 1&4 in appendix B for data recovery requirements. Report excursions monthly. For LK #2: Simpson may use the method "#2 Lime Kiln Continuous TRS Emissions Monitoring System" included in appendix D of this AOP, provided that #2 Lime Kiln processes lime mud ≤20% of the time on a calendar year basis. While this test method is in use, annual #2 Lime Kiln percent use shall be calculated and submitted with the monthly air report for December. If annual use is >20%, 40 CFR 60, App. B, Perf. Spec. 5 shall be used for all subsequent monitoring.	Order No.97AQ-I004, Order No. 1916-AQ05, and WAC 173-405-040(3)(c).

C. SMELT TANK #s 4E & 4W

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.1	Particulate	1.5 lbs/10,000 lbs BLS (0.3 lb/ton).	EPA Method 5 or DOE Method 8 is the reference test method. The permittee shall source test quarterly, using the method except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests. Report quarterly. (See Condition C.3 for surrogate monitoring necessary to satisfy CAM requirements.)	Order No. 97AQ-I004 and Order No. 1916-AQ05 for limit and monitoring; WAC 173-405-040(2) for limit.
C.2	Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period.	DOE Test Method 9B is the reference test method. See Condition C.3 for monitoring and reporting requirements.	Order No. 97AQ-I004 for limit and monitoring; WAC 173-405-040(6) for limit..

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.3 HAPs	Particulate surrogate: 0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired (see condition C.3a)	Maintain fan amps ≥ 62 and scrubber flow ≥ 35 gpm. Continuously monitor fan amps and scrubber flow. Begin corrective action, as specified in the SSM plan (see condition C.4), when an exceedence occurs (any 3-hr average out of compliance with fan amps or scrubber flow requirements). A violation occurs when 6 or more 3-hr averages are out of compliance with fan amps or scrubber flow requirements during a 6 month reporting period (not including applicable periods of startup, shutdown, or malfunction). For the purpose of determining the number of nonopacity exceedences, no more than one exceedence can occur per 24 hour period. Report exceedences monthly, and violations every 6 months.	40 CFR 63.862(a)(i) for limit; 40 CFR 63.864(e) for monitoring; 40 CFR 63.864 (k)(1) for corrective action; 40 CFR 63.864 (k)(2) for violation definition; 40 CFR 63.864 (k)(3) for number of exceedences per period. 40 CFR 63.6(f) for SSM exclusion.

C.3a If a source test exceeds the particulate surrogate concentration listed in condition C.3, Simpson may use the PM overall compliance method described in 40 CFR 63.862(a)(ii) and 66 FR 3180 (January 12, 2001 or most recent version) to demonstrate compliance with the HAPS standard. The calculation must be made with the source test data from LK #1, RF #4, and smelt tank #s 4E & 4W for the same month, if available, or most recent source test data, if data from the same month is not available.

C.4 SSM Plan [40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)]
 Simpson shall comply with the SSM plan requirements identified in section J of this AOP.

D. POWER BOILER # 6

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.1 Particulate	0.10 gr/dscf @ 7% O ₂ .	EPA Method 5 or DOE Method 8 is the reference test method. The permittee shall sample using the reference method except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests as follows: one test per three years while firing natural gas; once every 90 days on oil if oil is fired for > 4 successive days. Report test results monthly if testing requirement was triggered. Maintain records of daily fuel usage.	Order No. 97AQ-I004 and WAC 173-405-040(5)(c) for limit; Order No. 97AQ-I004 and Order No. 1916-AQ05 for monitoring.
D.2 Opacity	Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours.	When fuel oil is combusted the permittee will perform visual opacity assessments within 24 hours of boiler startup and weekly thereafter. If the observer decides that there may be excess opacity the facility will take steps to identify and correct the causes of the opacity and within 24 hours conduct a visual assessment to confirm compliance. When burning natural gas the visual assessment is waived. Results of all tests and any corrective actions taken will be reported in the monthly report immediately following when they were obtained. Maintain records of daily fuel usage.	Order No. 97AQ-I004 and WAC 173-405-040(6) for limit.
D.3 SO ₂	1000 ppm @ 7% O ₂ hourly average.	Maintain fuel receipts showing that all oil fired was $\leq 2\%$ sulfur. Maintain records of daily fuel usage.	WAC 173-405-040(11)(b) for limit.

E. POWER BOILER # 7

Simpson shall comply with the applicable requirements of 40 CFR 60 Subparts A and Db for Power Boiler No. 7, which include the following general requirements:

- 40 CFR 60.7(b) & (f) concerning record keeping,
- 40 CFR 60.7(c), (d), & (e) concerning reporting,
- 40 CFR 60.11(d) concerning operation and maintenance,
- 40 CFR 60.12 concerning concealment,
- 40 CFR 60.13 concerning monitoring, and
- 40 CFR 60.19 concerning notification and reporting.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.1	Particulate	0.01 gr/dscf @ 7% O ₂ .	EPA Method 5 is the reference test method. The permittee shall source test quarterly using EPA Method 5 except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests Report test results quarterly. See Condition E.1a for minimum O&M requirements intended to indicate compliance with the particulate limit	Order No. 97AQ-I004.
		0.05 gr/dscf @ 7% O ₂ .	Same as for previous limit.	WAC 173-405-040(5)(a).
		0.10 lb/mmBtu, except during SSM periods.	Same as for previous limit.	40 CFR 60.43b(c)(1) and 40 CFR 60.43b(g).
E.1a	Monitor opacity continuously and maintain an opacity alarm. Take corrective action immediately whenever alarm indicates 6 minute opacity average greater than 10% or a one hour opacity average of >6%. Failure to take corrective action is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly.			
E.2	Opacity	10% average for more than 6 consecutive minutes in any 60 minute period.	DOE Test Method 9B is the reference test method. Monitor continuously using an approved CEM that conforms to 40 CFR Pt. 60, App. B, Perf. Spec. 1. See 1&4 in appendix B for data recovery requirements. Report daily maximum 6-minute opacity averages and exceedences monthly.	Order No. 97AQ-I004.
		Average 20% for more than 6 consecutive minutes in any 60 minute period, except for one six minute period of not more than 27% opacity and except during periods of SSM.	Same as for previous limit except see 1&3 in appendix B for data recovery requirements.	40 CFR 60.43b(f) for basis of limit. 40 CFR 60.48b(a) for basis of monitoring.
		Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours.	Same as for previous limit except see 1&4 in appendix B for data recovery requirements.	WAC 173-405-040(6).

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.3	NO _x	0.30 lbs/MMBTU, 30 day rolling average.	Monitor continuously using an approved CEM that conforms to 40 CFR Pt. 60, App. F and App. B, Perf. Spec. 2. See 1&3 in appendix B for data recovery requirements. Report test results and rolling average emissions monthly.	Order No. 97AQ-I004 and 40 CFR 60.44b(d) for limit. 40 CFR 60.48b(b) and 40 CFR 60.49b(i) for CEM requirements.
		363 tpy annual rolling total calculated monthly.	Monitor continuously using an approved CEM that conforms to 40 CFR Pt. 60, App. F and App. B, Perf. Spec. 2. Report annual rolling mass emissions monthly.	Order No. 97AQ-I004.
E.4	SO ₂ from oil	75,000 lbs steam/hour when using ≤2% sulfur fuel oil.	Sample fuel oil for sulfur content when tank is filled using ASTM Method D129-64, D1552-83, D4057-81, or equivalent. Monitor the oil firing rate continuously, log hourly oil firing rate.	Order No. 97AQ-I004.
		175,000 lbs steam/hour when using ≤1% sulfur fuel oil.	Sample fuel oil for sulfur content when tank is filled using ASTM Method D129-64, D1552-83, D4057-81, or equivalent. Monitor the oil firing rate continuously, log hourly oil firing rate.	Order No. 97AQ-I004.
		10% annual capacity factor from oil.	Fuel mass balance. Maintain records of fuel usage. Calculate and report annual oil capacity factor monthly	Order No. 97AQ-I004.
		111 tpy.	Calculate from fuel oil sulfur content and usage. Report running total in monthly report unless all oil fired was ≤0.5% sulfur. In that case, the only requirement is to certify that only very low sulfur oil was used.	Order No. 97AQ-I004.
		0.5 lb/MMBTU, 30 day rolling average	Calculate rolling average daily by methods in 40 CFR 60.47b(b). Report calculation results monthly.	40 CFR 60.42b(d)(1) 40 CFR 60.42b(e) 40 CFR 60.47b(a) 40 CFR 60.49b(j) 40 CFR 60.47b(b).
E.4b	SO ₂	1000 ppm @ 7% O ₂ , hourly average.	Sample fuel oil for sulfur content when tank is filled using ASTM Method D129-64, D1552-83, D4057-81, or equivalent. Maintain records showing that all oil fired was ≤2% sulfur.	WAC 173-405-040(11)(b).
E.5	CO	600 ppm @ 7% O ₂ , 30 day rolling average.	Monitor continuously using an approved CEM that conforms to 40 CFR Pt. 60 App. F and App. B, Perf. Spec. 4. See 1&4 in appendix B for data recovery requirements. Report excursions monthly.	Order No. 97AQ-I004.
		450 tpy.	Monitor continuously using an approved CEM that conforms to 40 CFR Pt. 60 App. F and App. B, Perf. Spec. 4. Report year to date total monthly.	Order No. 97AQ-I004.
E.6	VOC	0.15 lbs/MMBTU.	Source test twice per year using EPA Method 25A or equivalent. Use the average of 3 one-hour runs. Report results on most immediate monthly report.	Order No. 97AQ-I004.

E.7 Operate a continuous emission monitor for O₂ that conforms to 40 CFR Pt. 60 Appendix F and Appendix B, Performance Specification 3. [Order No. 97AQ-I004]

E.8 Monthly monitoring reports must include any occurrence of excess emissions recorded on a CEM for Power Boiler #7, including the time, magnitude, duration, cause, and any corrective action. [Order No. 97AQ-I004; 40 CFR 60.49b(h); 40 CFR 60.7(c)]

E.9 The permittee may not fire Power Boiler #7 with hogged fuel while both sides of the precipitator are out of service; however, it may fire oil or natural gas subject to all applicable air emission limits. The permittee shall monitor and

record the time and duration when both sides of the precipitator are out of service at the same time, and maintain facility operation records showing that the firing limitation was followed. All violations will be reported in the most immediate monthly report. [Order No. 97AQ-I004]

- E.10 The permittee shall maintain the records specified in 40 CFR 60.7(b), (c), (d) and (f) pertaining to the operation of Power Boiler #7, its associated air pollution control equipment, and its continuous monitoring system (CMS). CMS data, including measurement results, performance evaluations, calibration checks, adjustments and maintenance performed, and operating records are to be recorded in a form suitable for inspection. Submit monthly a summary report of excess emissions and submit quarterly monitoring system performance report. [40 CFR 60.7(b), (c), (d) and (f)]
- E.11 The permittee shall maintain records of the amount of fuel combusted each day in Power Boiler #7 and, at the end of each month, calculate annual capacity factors for each fuel on a 12-month rolling average basis. [40 CFR 60.49b(d)]
- E.12 The permittee shall maintain records and report information concerning NO_x emissions, NO_x continuous emission monitoring system, and SO₂ emissions data for #7 Power Boiler as described in 40 CFR 60.49b(g), (i), (j), & (k). Report excess emissions monthly. All other required reporting to be done at least quarterly. If all oil fired was ≤0.5% sulfur, the only requirement for SO₂ emissions reporting is to certify that only low sulfur fuel oil was combusted in the facility during the reporting period [40 CFR 60.49(r)].

F. CAUSTICIZER SLAKER VENT

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
F.1	Particulate	≤0.10 gr/dscf @ standard conditions	Monitor at the request of Ecology.	WAC 173-400-060.

G. DIGESTER, MULTIPLE-EFFECTS EVAPORATORS, & CONDENSATE STRIPPER SYSTEM

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
G.1	TRS	Treat noncondensable gas (NCG) to reduce TRS emission equal to reduction achieved by thermal oxidation in a lime kiln; install a backup treatment system	Maintain records of continuous treatment as demonstrated by vent valve position, monthly NCG system inspections, and number of hours system vents each month. Report periods of untreated venting.	WAC 173-405-040(4)

H. INDUSTRIAL STACK SOURCES

Air emissions from the following units, which comprise the "industrial stack sources" at the facility as listed in the "SIP for Particulate Matter the Tacoma Tideflats," shall not exceed 1671 kg/day of PM-10, as measured using the procedures in Appendix C: Recovery Furnace No. 3; Recovery Furnace No. 4; Lime Kiln No. 1; Lime Kiln No. 2; Smelt Tank No. 3; Smelt Tank No. 4E; Smelt Tank No. 4W; #6 Power Boiler; and Power Boiler No. 7. Industrial stack sources do not include existing fugitive, area, and insignificant point source emissions. This limit may be modified through new source review or a SIP revision. Monitoring, reporting and recordkeeping requirements are described in Appendix C. [Order No. 95AQ-I006]

Note: the SIP includes the emissions from Recovery Furnace No. 3 and Smelt Vent No. 3. Simpson is prohibited from operating Recovery Furnace No. 3 and Smelt Vent No. 3. [Order No. 99AQIS-94, Condition 3]

I. COMPLIANCE ASSURANCE MONITORING (CAM)

Under 40 CFR Part 64 Simpson is required to submit a CAM Plan. CAM monitoring requirements are applicable for particulates at RF No. 4, Smelt Tank Vents 4E and 4W, Lime Kilns 1&2, and Power Boiler No.7.

MACT 2 monitoring requirements [40 CFR Part 63.864] for RF No. 4, Smelt Tank Vents 4E and 4W, and Lime Kilns 1&2 satisfy the requirements for CAM. PB 7 monitoring to provide CAM is met with by the requirements of condition E.1a.

J. NESHAP SSM PLAN, RECORDKEEPING, AND REPORTING

The Simpson mill contains affected sources subject to the NESHAP for the Pulp and Paper Industry (Subpart S) and the NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (Subpart MM). The SSM Plan, recordkeeping and reporting requirements in J.1 through J.10 apply to the affected sources listed in sections A, B, C, K, L, M and N of this permit. The requirements in J.11 apply to the affected sources listed in sections K, L, M and N. The requirements in J.12 apply to the affected sources listed in sections A, B and C.

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
J.1	HAPs	Operation and Maintenance/SSM Plan	Develop and implement a written startup, shutdown, and malfunction (SSM) plan for operating and maintaining affected sources subject to NESHAP Subparts S & MM during SSM periods, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63 Subparts S & MM standards. The SSM plan shall include the elements set forth in 40 CFR 63.6(e)(3).	40 CFR 63.6(e)(3)(i)
J.2			During SSM periods, operate and maintain regulated mill systems (including associated air pollution control equipment) in accordance with the SSM plan. Malfunctions shall be corrected as soon as possible after their occurrence in accordance with the SSM plan	40 CFR 63.6(e)(3)(i)
J.3			Change the SSM plan, if required by Ecology, if it is determined to be unacceptable under 40 CFR 63.6(e)(2).	40 CFR 63.6(e)(3)(i)
J.4			Update the SSM plan within 45 days of an SSM event that the plan failed to address or inadequately addressed.	40 CFR 63.6(e)(3)(i)
J.5	Recordkeeping (General Requirements)		NESHAP Subparts S & MM Record Retention - maintain files of all information (including all reports and notifications) required by 40 CFR Part 63, Subparts S & MM in a form suitable and readily available for inspection for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks or on microfiche.	40 CFR 63.10(b)(1) and 40 CFR 63.6(e)(3)(v)
J.6			Keep the SSM Plan on record to be made available for inspection, upon request, by the Ecology or EPA, for the life of mill, or until the mill is no longer subject to the provisions of 40 CFR Part 63. If the SSM Plan is revised, keep previous (i.e. superseded) versions of the Plan on record, to be made available for inspection, upon request, by the Ecology or EPA, for five years following each revision of the Plan.	40 CFR 63.10(b)(1) and 40 CFR 63.6(e)(3)(v)

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
J.7	Reporting (General Requirements)	Immediate SSM Plan Deviation Report. Any time an action taken during a SSM event (including actions taken to correct a malfunction) is not consistent with the procedures in the permittee's 40 CFR 63 Subparts S & MM SSM Plan, make an immediate report of the actions taken for that event to Ecology within 2 working days, by telephone or facsimile transmission. The immediate report shall be followed by a letter explaining the circumstances of the event, the reasons for not following the plan, and whether any 40 CFR 63 Subpart S or MM excess emissions and/or parameter monitoring exceedences are believed to have occurred. For purposes of this report, a "malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner (failures caused in part by poor maintenance or careless operation are not malfunctions).	40 CFR 63.10(d)(5)(ii) and WAC 173-401-615(3)
J.8		Semi-annual NESHAP Subparts S & MM Summary Report. The monthly CEM reports filed (by July 30 th and January 30 th) for the months of June and December shall include a semi-annual NESHAP Subparts S & MM excess emissions and continuous monitoring system performance report and/or summary report for the six month reporting periods ending June 30 and December 31.	40 CFR 63.10(e)(3) and WAC 173-401-615(3)
J.9		Semi-annual SSM Report. If actions taken during SSM events were consistent with the procedures in the permittee's SSM plan the semi-annual report required under section J of this AOP shall include a statement to that effect.	40 CFR 63.10(d)(5)(i) and WAC 173-401-615(3)
J.10		Comply with NESHAP General Reporting.	40 CFR 63.10(b) and (c)
J.11	Additional Reporting Requirements for Subpart S Affected Sources	Every two years beginning April 15, 1999, submit a non-binding control strategy report in accordance with applicable requirements.	40 CFR Part 63 §63.455(a); 40 CFR Part 63 §63.455(b)(1) through (b)(3); and 40 CFR Part 63 Subpart A, Section §63.9(b)(2)
J.12	Additional SSM Plan Requirements for Subpart MM Affected Sources	In addition to the requirements specified in §63.6(e)(3), the SSM plan for Subpart MM sources must include: procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance; a maintenance schedule for each control technique and recommendations for routine and long-term maintenance; and an inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.	40 CFR 63.866(a)

K. LOW VOLUME HIGH CONCENTRATION (LVHC) SYSTEM

(NESHAP Subpart S)

Applies to offgases from:

Nos. 1 and 2 Kamyr steaming vessel,
 Nos. 1 and 2 Kamyr flash tank/blow tank,
 Kamyr flash evaporator,
 No. 1 & 2 evaporator hotwell,
 No. 4 evaporator hotwell,
 Turpentine system, and
 Pulping condensate collection tank.

[40 CFR Part 63, §63.443(a)(1)(i) & 40 CFR Part 63, §63.440(d)] (Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
K.1	HAPs	Collection and Treatment	LVHC non-condensable gas source group emissions shall be enclosed and vented into a closed-vent system and routed to the Lime Kilns.	40 CFR Part 63, §63.443(c)
K.2			Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures in 40 CFR Part 63, §63.457(e). Each enclosure or hood opening closed during the initial performance test shall be maintained in the closed position at all times except when necessary to open for sampling, inspection, maintenance, or repairs.	40 CFR Part 63, §63.450(a)&(b)
K.3			Each component of the closed-vent system used to control LVHC non-condensable gas source group emissions that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 ppmv above background, as measured by 40 CFR 60, Appendix A, Method 21.	40 CFR Part 63, §63.450(c) and 40 CFR Part 63, §63.457(d)
K.4			Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the limitations in 40 CFR Part 63, §63.443 shall comply with the following: On each bypass line; install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line (note: monitoring bypass valve position is a satisfactory flow indicator). For bypass line valves that are not computer controlled, maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.	40 CFR Part 63, §63.450(d)
K.5			Introduce LVHC gases with the primary fuel or into flame zone of the Lime Kilns.	40 CFR Part 63, §63.443(d)(4)

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
K.6	Inspection and Monitoring	Install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system as specified in 40 CFR 63.453 (b) through (m) except as allowed in 40 CFR 63.453(m). The CMS shall include a continuous recorder.	40 CFR Part 63, §63.453(b) through (m)
K.7		For each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.	40 CFR Part 63, §63.453(k)(1)
K.8		Each closed vent system (reasonably accessible ductwork, piping, enclosures, and connections to covers in the collection system for the LVHC non-condensable gas source group) shall be visually inspected for visible evidence of defects every 30 days or as requested by the Department.	40 CFR Part 63, §63.453(k)(2)
K.9		Measure initially and annually components of closed-vent systems under positive pressure for detectable leaks as specified in 40 CFR Part 63, §63.457(d).	40 CFR Part 63, §63.453(k)(3)
K.10		Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR Part 63, §63.457(e).	40 CFR Part 63, §63.453(k)(4)
K.11		If an inspection of the LVHC non-condensable gas collection system identifies visible defects, or if an instrument reading of 500 ppmv or greater above background is measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR Part 63, §63.457(d), or if enclosure openings are not maintained at negative pressure, take the following corrective action as soon as practicable. Make a first effort to repair or correct the closed-vent system as soon as practicable but no later than 5 calendar days after the problem is identified. Complete the repair or corrective action no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the permittee determines that the emissions resulting from immediate repair would be greater than the emission likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.	40 CFR Part 63, §63.453(k)(6) and 40 CFR Part 63, §63.457(d)

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
K.12	Recordkeeping (specific to LVHC)	<p>For each applicable enclosure opening, closed vent system, and closed collection system, prepare and maintain a site-specific inspection plan, including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:</p> <ul style="list-style-type: none"> date of inspection, equipment type and identification, results of negative pressure tests for enclosures, and results of leak detection tests. <p>In addition, if any defects or leaks are detected record:</p> <ul style="list-style-type: none"> nature of the defect or leak and the method of detection, date the defect or leak was detected and the date of each attempt to repair the defect or leak, repair methods applied in each attempt to repair the defect or leak, reason for the delay if the defect or leak is not repaired within 15 days, expected date of successful repair of the defect or leak if the repair is not completed within 15 days, date of successful repair of the defect or leak, position and duration of opening of bypass line valves and the condition of any valve seals, and duration of the use of manual or computer-controlled bypass valves. 	40 CFR Part 63, §63.454(b)
		Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the LVHC non-condensable gas source group are not violations of 63.443(c) and (d) provided that the time of excess emissions, not including periods of startup, shutdown, and malfunction, divided by the total process operating time in a semiannual reporting period does not exceed one (1) percent from the computer-controlled bypass valves in the LVHC system.	40 CFR Part 63, §63.443(e)(1)
K.14	SSM Plan	Simpson shall comply with the SSM plan requirements identified in section J of this AOP.	40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)

L. PULPING PROCESS CONDENSATES

(NESHAP Subpart S)

Applies to:

Nos. 1 and 2 Kamyr digesters, flash condenser and turpentine recovery condensate streams routed to the Kamyr evaporator hotwell and the associated condensate transfer tank.

Black liquor evaporator condensates from feed stages, surface condensers, and vacuum system of the No. 1 and No. 2 evaporators routed to the No. 1, 2 evaporator hotwell: and, black liquor evaporator condensates from feed stages, surface condenser, and vacuum system of the No. 4 evaporator system, routed to the No. 4 evaporator hotwell.

HVLC collection system condensates; and

LVHC collection system condensates.

[40 CFR Part 63, §63.440(d) and 40 CFR Part 63, §63.6(i)] (Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
L.1	HAPs	Collection and Treatment	Collect kraft pulping condensate streams such that one of the following collection requirements is satisfied: Kraft pulping condensate is collected from all named condensate streams; Kraft pulping condensate is collected from each HVLC collection system, from each LVHC collection system, and from other named condensate streams that in total contain at least 65 percent of the total HAP mass from the kraft pulping condensate from each digester system, each turpentine recovery system, vapors from the weak black liquor feed stages of each evaporator system, and the evaporator vacuum system for each weak black liquor feed stage; or Kraft pulping condensate collected from named condensate streams contains at least 11.1 pounds of total HAP per oven-dry ton of unscreened brownstock. kraft pulping condensate collected from named condensate streams contains at least 11.1 pounds of total HAP per oven-dry ton of unscreened brownstock feeding the bleach plant and 7.2 pounds of total HAP per oven-dry ton of unscreened brownstock not intended for bleaching.	40 CFR Part 63, §63.446(c)
L.2			Transfer collected kraft pulping condensate through a closed collection system. The closed collection system shall meet the requirements in 40 CFR Part 63, Subpart RR, Sections §63.960, §63.961, and §63.962, except for the closed vent systems and control devices shall be designed and operated in accordance with 40 CFR Part 63, §63.443(d) and 63.450.	40 CFR Part 63, §63.446(d)(1)

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
L.3		<p>The permittee is permitted to install and operate condensate collection tanks (CCT) to collect kraft pulping condensate.</p> <p>The CCT shall be equipped so that the fixed roof and all openings are operated with no detectable leaks, as indicated by an instrument reading of less than 500 ppmv above background as measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR Part 63, §63.457(d). Each opening will be maintained in a closed, sealed position at all times that the tank contains condensate, except when necessary to use the openings for sampling, removal, or for equipment inspection, maintenance, or repair.</p> <p>The CCT shall be equipped with a water seal device on the overflow line.</p> <p>The CCT shall be vented to a closed vent system meeting the requirements in 40 CFR Part 63, §63.450. CCT vent gases shall be incinerated in Lime Kiln and/or Hog Fuel Boiler.</p> <p>The CCT shall be inspected for detectable leaks initially and annually using the procedures in 40 CFR Part 63, §63.457(d).</p> <p>Kraft pulping condensate collected in the CCT shall be transferred in a closed collection system to the UNOX Reactor.</p>	<p>40 CFR Part 63, §63.446(d)(2) and 40 CFR Part 63, §63.457(d)</p> <p>40 CFR Part 63, §63.962(b)(2)(i)(A)</p> <p>40 CFR Part 63, §63.446(d)(2)(i)</p> <p>40 CFR Part 63, §63.453(l)(2)</p> <p>40 CFR Part 63, §63.446(e)(2)</p>
L.4		Kraft pulping condensate shall be treated to demonstrate 92% destruction of total HAPs (with methanol as a surrogate) calculated as per 40 CFR 63.457(l)(1).	40 CFR Part 63, §63.446(e)(3), (4), (5)
L.5	Inspection and Monitoring	<p>The condensate collection system shall be visually inspected every 30 days. Follow the inspection requirements found in 40 CFR Part 63, §63.964(a)(1)(i)(A), §63.964(a)(1)(v), and §63.964(b)(1) and (2) including:</p> <p>The unburied portion of the collection system piping shall be visually inspected to verify that there are no defects.</p> <p>The inspection shall include verification that appropriate liquid levels in the water seals in the CCT are being maintained and identify any other defects that could reduce water seal control effectiveness.</p>	<p>40 CFR Part 63, §63.453(l)</p> <p>40 CFR Part 63, §63.964(a)(1)(iii)</p> <p>40 CFR Part 63, §63.964(a)(1)(i)(A)</p>
L.6		<p>Follow the repair requirements found in 40 CFR Part 63, §63.964(a)(1)(i)(A), §63.964(a)(1)(v), and §63.964(b)(1) and (2) including:</p> <p>The first effort to repair a defect shall be no later than 5 calendar days after detection. Repair shall be completed as soon as practicable but no later than 15 calendar days after detection unless the repair of the defect requires emptying or temporary removal from service of the collection system.</p> <p>If repair of the defect requires emptying or temporary removal of the condensate collection system from service, the defect will be repaired the next time the process equipment generating the condensate stops operation. The repair of the defect will be completed before the process resumes operation.</p>	40 CFR Part 63, §63.964(b)(1) and (2)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
L.7			The control device shall be operated in a manner consistent with the procedures/values established under this 40 CFR 63 Subpart S except as provided in 40 CFR 63.453 (p), 40 CFR 63.443(e), or 40 CFR 63.446(g). Daily monitoring requirements to comply with shall include: Monitoring of the site-specific parameters - calculate a 15 day rolling average of aerator amperage. Aerator amperage shall be measured at least once every 15 minutes. Compliance shall be demonstrated by: 15 day rolling aerator amperage average >87 amps per cell when operating two cells in parallel, or 15 day rolling aerator amperage average >253 amps when operating one cell. To change the average amperage values the procedures in 40 CFR 63.453(n) must be followed.	40 CFR 63.446(e)(2) & 40 CFR 63.453(n)
L.8			Conduct a performance test within 45 days after the beginning of each quarter and meet the applicable emission limit in 40 CFR 63.446(e)(2). The performance test conducted in the first quarter (annually) shall be performed for total HAP as specified in 40 CFR 63.457(g) and meet the percent reduction or mass removal emission limit specified in 40 CFR 63.446(e)(2). The remaining quarterly performance tests shall be performed as specified in paragraph (j)(3)(i) of this section except Simpson may use the applicable methanol procedure in 40 CFR 63.457(l)(1) or (2) and the value of r determined during the first quarter test instead of measuring the additional HAP to determine a new value of r.	40 CFR 63.457(l)
L.9		SSM Plan	Simpson shall comply with the SSM plan requirements identified in section J of this AOP.	40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)

M. BLEACHING SYSTEM

(NESHAP Subpart S)

Applies to:

First chlorine dioxide tower vent,
First chlorine dioxide stage washer vent,
First chlorine dioxide stage filtrate tank vent,
Extraction stage washer vent,
Extraction stage filtrate tank vent,
Second chlorine dioxide tower vent,
Second chlorine dioxide stage washer vent, and
Second chlorine dioxide stage filtrate tank vent.

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference.)

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
M.1	HAPs	Collection and Treatment	Vent gases from bleaching system stages where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to the Bleach Plant Scrubber.	40 CFR Part 63, §63.445(b)
M.2			Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures in 40 CFR Part 63, §63.457(e). Each enclosure or hood opening closed during the initial performance test shall be maintained in the closed position at all times except when necessary to open for sampling, inspection, maintenance, or repairs.	40 CFR Part 63, §63.450(b)
M.3			Each component of the closed-vent system used to control bleaching system source group emissions that is operated at positive pressure and located prior to the scrubber shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 ppmv above background, as measured by 40 CFR 60, Appendix A, Method 21.	40 CFR Part 63, §63.450(c) and 40 CFR Part 63, §63.457(d)
M.4			The Bleach Plant Scrubber shall reduce the total chlorinated HAP mass in the vent stream entering the scrubber by 99 percent or more by weight; achieve a scrubber outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or achieve a scrubber outlet mass emission rate of 0.002 pounds of total chlorinated HAP mass per ton of ODP.	40 CFR Part 63, §63.445(c)
M.5			The permittee shall either: comply with the chloroform limitations under 40 CFR 430.24(a)(1) and (e), or use no hypochlorite or chlorine for bleaching in the bleaching system.	40 CFR Part 63, §63.445(d)
M.6	Inspection and Monitoring		Monitor scrubber liquid inlet flow rate to the active section of the scrubber and scrubber effluent pH or oxidation/reduction potential (ORP) with continuous monitoring systems (CMS). Fan operation shall also be measured and recorded as an indicator of gas scrubber vent gas inlet flow rate. The CMS shall be operated and maintained according to the manufacturer's specifications and shall include a continuous recorder. Compliance shall be demonstrated by: Fan operation: on Liquid inlet flow to the active section of the scrubber: Weak wash ≥ 42 gpm – 3-hour average, or White liquor ≥ 77 gpm – 3-hour average. ORP: Weak wash $\leq (-668 \text{ mv})$ – 3-hour average, or White liquor $\leq (-361 \text{ mv})$ – 3-hour average. To change the operational values the procedures in 40 CFR 63.453(n) must be followed.	40 CFR Part 63, §63.453(a) and (c)
M.7			If alternative monitoring is desired, the permittee shall petition the Department and USEPA to use alternate parameters to monitor the bleach plant scrubber.	40 CFR Part 63, §63.453(m)
M.8	SSM Plan		Simpson shall comply with the SSM plan requirements identified in section J of this AOP.	40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)

N. HIGH VOLUME LOW CONCENTRATION (HVLC) SYSTEM

(NESHAP Subpart S)

Comply with the requirement of 40 CFR 443(a)(1)(ii) through (a)(1)(v) as expeditiously as practicable, but not later than April 17, 2006. [40 CFR 63.440(d)(1)].

Applies to the following systems:

Pulp washing,
 Knotter system,
 Screen system.

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference.)

	Parameter	Limit (shall not exceed)	Requirement	Applicable Requirements
N.1	HAPs	Collection and Treatment	The HVLC system shall be enclosed and vented to No. 4 Recovery Furnaces except for each knotter system that does not exceed 0.1 pounds of HAPs per ODP ton, and each screen system that does not exceed 0.2 pounds HAPs per ODP ton.	40 CFR Part 63, §63.443(a)(1)(ii)(A) §63.443(a)(1)(ii)(B) §63.443(c) §63.443(d)(4)
N.2			The HVLC system shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.	40 CFR Part 63, §63.450(a)&(b)
N.3			Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in §63.443 shall comply with either of the following requirements: (1) On each bypass line, Simpson shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that is capable of taking periodic readings as frequently as specified in §63.454(e). The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line (note: monitoring bypass valve position is a satisfactory flow indicator); or (2) For bypass line valves that are not computer controlled, Simpson shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.	40 CFR Part 63, §63.450(d)
N.4		Monitoring & Reporting	For each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.	40 CFR Part 63, §63.453(k)(1)
N.5			Each closed vent system (reasonably accessible ductwork, piping, enclosures, and connections to covers in the collection system for the HVLC system) shall be visually inspected for visible evidence of defects every 30 days or as requested by the Department.	40 CFR Part 63, §63.453(k)(2)

	Parameter	Limit (shall not exceed)	Requirement	Applicable Requirements
N.6			Measure initially and annually components of closed-vent systems under positive pressure for detectable leaks as specified in 40 CFR Part 63, §63.457(d).	40 CFR Part 63, §63.453(k)(3)
N.7			Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR Part 63, §63.457(e).	40 CFR Part 63, §63.453(k)(4)
N.8			<p>If an inspection of the HVLC system identifies visible defects, or if an instrument reading of 500 ppmv or greater above background is measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR Part 63, §63.457(d), or if enclosure openings are not maintained at negative pressure, take the following corrective action as soon as practicable.</p> <p>Make a first effort to repair or correct the closed-vent system as soon as practicable but no later than 5 calendar days after the problem is identified.</p> <p>Complete the repair or corrective action no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the permittee determines that the emissions resulting from immediate repair would be greater than the emission likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.</p>	40 CFR Part 63, §63.453(k)(6) §63.457(d)
N.9	Recordkeeping (specific to HVLC)		<p>For each applicable enclosure opening, closed vent system, and closed collection system, prepare and maintain a site-specific inspection plan, including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:</p> <p>date of inspection, equipment type and identification, results of negative pressure tests for enclosures, and results of leak detection tests.</p> <p>In addition, if any defects or leaks are detected record:</p> <p>nature of the defect or leak and the method of detection, date the defect or leak was detected and the date of each attempt to repair the defect or leak, repair methods applied in each attempt to repair the defect or leak, reason for the delay if the defect or leak is not repaired within 15 days, expected date of successful repair of the defect or leak if the repair is not completed within 15 days, date of successful repair of the defect or leak, position and duration of opening of bypass line valves and the condition of any valve seals, and duration of the use of manual or computer-controlled bypass valves.</p>	40 CFR Part 63, §63.454(a)&(b)

	Parameter	Limit (shall not exceed)	Requirement	Applicable Requirements
N.10			Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the HVLC system are not violations of 63.443(c) and (d) provided that the time of excess emissions, not including periods of startup, shutdown, and malfunction, divided by the total process operating time in a semiannual reporting period does not exceed four (4) percent.	40 CFR Part 63, §63.443(e)(2)
N.11		SSM Plan	Simpson shall comply with the SSM plan requirements identified in section J of this AOP.	40 CFR 63.6(e)(3)(i) & 40 CFR 63.866(a)

O. POWER BOILER MACT

(NESHAP Subpart DDDDD)

Comply with the requirements this subpart (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters), including:

1. Submit initial notification no later than March 14, 2005. [40 CFR 63.7545(b)]
2. Comply with Subpart DDDDD no later than September 13, 2007. [40 CFR 63.7495]
3. Conduct a Performance Test to demonstrate compliance no later than March 11, 2008. [40 CFR 63.7510(d)]
4. Submit a Notification of Compliance Status, including Performance Test results, no later than May 11, 2008. [40 CFR 63.7545(e)]
5. Submit semiannual Compliance Reports beginning July 31, 2008. [40 CFR 63.7550(b)]

FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600]

These generally applicable requirements apply facility-wide, including insignificant emission units or activities. Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. Varying Emission Rate. The permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations. [WAC 173-400-205]
2. Detrimental Emissions. The permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(5)]
3. Concealment and Masking. The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(7)]
4. Fugitive Emissions. The permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(3)(a)]
5. Fugitive Dust. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(8)(a)]
6. Particulate Matter Deposition. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment. [WAC 173-400-040(2)]
7. Odors. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(4)]
8. Opacity. The permittee may not cause or allow the emission of a plume from any emission unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than 20% for more than 6 consecutive minutes in any 60 minute period except as provided in WAC 173-405-040(6). [WAC 173-405-040(6)]

9. Complaints. Except where specific requirements are defined elsewhere, the permittee shall assure compliance with conditions 1 through 8 by recordkeeping of actions taken by the permittee in response to complaints received by the permittee or of possible noncompliance noticed by the facility staff in day to day operations. The permittee shall assess the validity of each complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The permittee shall keep records of the following: complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the complaint. [WAC 173-401-630]
10. Sulfur Dioxide Emissions. The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed 1,000 parts per million for an hourly average, corrected to 7% oxygen for combustion units. [WAC 173-405-040(11)]
11. reserved
12. Good Air Pollution Control Practice. The permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [WAC 173-405-040(10); 40 CFR §60.11(d) for power boiler #7 & recovery furnace #4, 40 CFR 63.6(e)(1)]
13. Chemical Accidental Release Program. The Permittee does not meet the applicability standards for Accidental Release Prevention Provisions under 40 CFR Part 68. Permittee has a general duty to: identify hazards which may result from accidental releases using appropriate hazard assessment techniques; to design and maintain a safe facility taking such steps as are necessary to prevent releases; and to minimize the consequences of accidental releases that do occur. [Clean Air Act §112(r)(1)]
14. Stratospheric Ozone Protection.
 - a. The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
 - i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
 - ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.

- iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 (“MVAC-like appliance” is defined at § 82.152.)
 - v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166.
 - b. Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]
 - c. Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]
 - d. The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 7070.94.970(2), 970(4)] State Only
 - e. Compliance with this term and condition will be demonstrated by using a certified contractor or employee.
- [40 CFR Section 82 and RCW 70.94.970 (the RCW is a **state-only** requirement)]
15. Insignificant Emission Units. The generally applicable requirements that apply to IEUs are, WAC 173-405-040(5), WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]
16. Volatile Organic Liquid Storage Vessels. The Permittee shall keep records showing the dimensions and capacities of all storage vessels having capacities greater than or equal to 40 cubic meters that are used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after July 23, 1984. These records are to be kept for the life of each storage vessel. [40 CFR 60.116b (a) and (b)]
17. Used Oil Burning. The following condition is **state-only** and is not federally enforceable under the Clean Air Act. The permittee can burn used oil only if it meets the standards prescribed in RCW 70.94.610. The requirements of RCW 70.94.610(1) do not apply to used oil burned in emission units regulated under this AOP, because such emission units are "facilities permitted by the department" per RCW 70.94.610(2). [RCW 70.94.610]
18. Asbestos. The permittee shall comply with the applicable requirements of 40 CFR Part 61, subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility. [WAC 173-400-075]

MONITORING, RECORDKEEPING & REPORTING

Monitoring Requirements [WAC 173-401-630(5)(b).]

19. Unit-Specific Requirements. The permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required by specific emission unit conditions of this permit. [WAC 173-405-072].
20. Unavoidable Excess Emissions. This condition applies, where applicable, to excess emissions that are claimed to be unavoidable pursuant to WAC 173-400-107. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and are not subject to penalty. [WAC 173-400-107]
21. Violation Duration. A violation of an emission limit is presumed to commence at the time of the testing, recordkeeping or monitoring indicating noncompliance, and to continue until the time of retesting, recordkeeping or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred or that the violation was not continuing in nature. [42 U.S.C. 7413(e)(2)]. The permittee may conduct monitoring or testing more frequently than required by this permit.
22. Insignificant Emission Units. The permittee is not subject to any testing, monitoring, reporting, or recordkeeping for the insignificant emission units or activities listed. [WAC 173-401-530(2)(c)]

Recordkeeping Requirements

23. Monitoring Records. The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
 - a. The date, place as defined in requirement, and time of sampling or measurement;
 - b. The date(s) analysis were performed;
 - c. The company or entity that performed the analysis;
 - d. The analytical techniques or methods used;
 - e. The results of such analysis; and
 - f. The operating conditions existing at the time of sampling or measurement.[WAC 173-401-615(2)(a); WAC 173-400-105; 40 CFR §60.49b(f) for Power Boiler #7 and Recovery Furnace #4]
24. Inspection Checklists. Where the permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:
 - a. The person conducting the inspection;
 - b. The date/time of the inspection;
 - c. Location of the inspection;

- d. The observations made during the inspection;
 - e. Corrective actions taken if any; and
 - f. The date and time corrective action was initiated and completed.
- [WAC 173-401-615(1)(b)]

25. Changes at Source. The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5).]
26. Records Retention. The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all data from continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c)]

Note: There is also a 2 year record retention requirement for Power Boiler #7 and Recovery Furnace #4. [40 CFR §60.49b(o)]

27. Recording Permit Deviations. The permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3)(b).]

Reporting Requirements [WAC 173-401-520, -615(3), & -710]

28. Unit Reporting Requirements. In addition to any emission unit specific reporting requirements identified below, emission unit specific reporting requirements are identified in specific emission unit conditions of this permit.
29. Production Reporting. Report within 15 days of the end of each month average daily production of air-dried unbleached pulp. [WAC 173-405-072(4)]
30. Monthly Reports. Monitoring reports required by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-405-072]. The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]
31. Emission Inventory. The permittee shall submit an inventory of emissions, as specified in WAC 173-405-078, from the source each year no later than 105 days after the end of the calendar year. The permittee shall maintain records of information necessary to substantiate any reported emissions. [WAC 173-405-078 and WAC 173-400-105(1)]
32. Permit Deviations/Excess Emissions. The permittee shall promptly submit a report of any deviations from permit conditions.
- a. For purposes of this permit, submitting a report “promptly” means the following: (1) if the deviation presents a potential threat to human health or safety, the report shall

be made as soon as possible but no later than 12 hours after the discovery of the deviation; (2) for other deviations, “promptly” means that the deviations are identified in the respective monthly report.

- b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.

[WAC 173-401-615(3)(b) and WAC 173-400-107]

- 33. Certifications. Any application form, report, or compliance certification submitted pursuant to Chapter 173-401 WAC shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]
- 34. Report Address. All reports, renewal applications, and compliance certifications required by this permit shall be submitted to:

Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7706

Compliance certification shall also be submitted to:

Environmental Protection Agency
Air Operating Permits, Region 10
1200 Sixth Avenue, OAQ-108
Seattle, WA 98101-1128

- 35. Compliance Requirements/Certification.
 - a. The permittee shall continue to comply with applicable requirements with which the permittee is in compliance;
 - b. The permittee shall meet applicable requirements that will become effective during the permit period on a timely basis;
 - c. The permittee shall submit a report to the Department of Ecology and to Region 10 of EPA 12 months after the effective date of this permit and annually thereafter, within 45 days after the close of the year the certification covers, certifying compliance with the terms and conditions contained in this permit. The certification shall describe the following:
 - i. the permit term or condition that is the basis of the certification;
 - ii. the compliance status;
 - iii. whether compliance was continuous or intermittent; and

iv. the methods used for determining compliance, currently and over the reporting period consistent with required monitoring.

Note: A report filed in a format approved by Ecology is deemed to meet the requirements of this condition.

- d. The permittee is not required to certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d), WAC 173-401-510(2)(h)(iii), and WAC 173-401-630 (5)]

STANDARD TERMS & CONDITIONS

36. Duty to Comply. The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]
37. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]
38. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]
39. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]
40. Duty to Provide Information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]
41. Permit Fees. The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. [WAC 173-401-620(2)(f)]

42. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]
43. Severability Clause. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]
44. Permit Appeals. The permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]
45. Permit Continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]
46. Application and Issuance of a Renewal Permit. The permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit. [WAC 173-401-710(1)&(2)]
47. Inspection and Entry. The permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:
 - a. Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.[WAC 173-401-630(2)]
48. Federally Enforceable Requirements. All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens

under the FCAA, unless they are specifically designated as not federally enforceable.
[WAC 173-401-625]

49. Reopening for Cause. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
 - b. Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.
 - c. Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. [WAC 173-401-730]
50. Tampering and False Statements. No person shall make any false material statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit. [WAC 173-400-105(7) and (8) and 40 CFR 70.11(a)]
51. Providing Additional Data. For Ecology to evaluate a plant's emissions or emission control program, the permittee shall furnish other data requested by Ecology. [WAC 173-405-072(5)]

PERMIT SHIELD

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the permittee from requirements enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530. [WAC 173-401-530(3)]

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed below do not apply to the facility, as of the date of permit issuance, for the reasons specified.

APPENDIX A - Permit Shield/ Inapplicable Requirements

The following requirements do not apply to the facility as of the date of permit issuance for the reasons indicated;

CITE	BRIEF DESCRIPTION	REASON
40 CFR Part 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Industrial Steam Generators (construction or modification commenced after 8/17/71)	Applies to the following types of fossil fuel-fired generating units for which construction or modification commenced after August 17, 1971: fossil fuel-fired units of > 250 million Btu/hour heat input; fossil fuel/wood residue fired units capable of firing fossil fuel at a heat input rate of > 250 million Btu/hour (73 MW). 40 CFR §60.40(a).	Facility's No. 6 power boiler does not exceed 250 million BTU/hr and was installed before 7/17/71.
40 CFR 60.42b(a)	Applies to subpart Db facility combusting coal or oil; SO ₂ 90% reduction requirement	Does not apply because §60.42(d)(1) applies
40 CFR 60.43b(b)	Particulate limit for subpart Db facility that combusts oil or mixtures of oil w/ other fuels and uses conventional or emerging technology to reduce SO ₂ emissions	facility does not use emerging technology for particulate control.
40 CFR 60.44b(b)	Establishes procedures for setting NO _x limits for facility that simultaneously combusts mixtures of coal, oil or natural gas	The #7 Power Boiler is physically incapable of co-firing gas and oil and is prohibited from firing coal without first obtaining approval through NSR.
40 CFR 60.44b(c)	Establishes procedures for setting NO _x limits, but does not apply if the unit is subject to a federally enforceable annual capacity factor of ≤ 10% for oil	The #7 Power Boiler is subject to a federally enforceable 10% oil limit
40 CFR 60.49b(e)	Applies to subpart Db facilities that combust residual fuel and meets criteria under §§60.46b(e), 60.44b(j) or (k)	The #7 Power Boiler does not meet the criteria for applicability.
40 CFR 60.112b, 113b, 115b, 116b (c), (d), (e), (f), and (g)	Apply to storage vessels containing volatile organic liquids (VOL's) for which construction, reconstruction, or modification commenced after July 23, 1984, if they exceed specified capacities and VOL vapor pressures.	Facility does not have any vessels constructed, reconstructed, or modified after July 23, 1984, that meet the qualifying criteria.
40 CFR Part 60 Subpart Dc Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units	Applies to steam generating units for which construction, modification or reconstruction commenced after June 9, 1989, and that has a maximum design heat input capacity of ≤ 100 million Btu/hour (29 MW), but > 10 million Btu/hour (2.9 MW). 40 CFR §60.40c(a)	Facility's No. 6 power boiler is >100 million BTU/hr and was installed before 6/9/89.
WAC 173-400-040	Meet most restrictive standard where 2 or more units are connected to a common stack, and unit-specific emissions data is not provided.	Facility does not have any emission units with different emission limits connected to a common stack.
WAC 173-400-040(1)	No visible emissions over 20% opacity for 3 minutes in any one hour, with 4 exceptions.	Opacity standards in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-040(3)(b)	Emissions unit identified as a significant contributor to nonattainment must use reasonable and available control methods to control emissions of contaminants for which area is designated nonattainment	No emissions unit at the facility have been identified as a significant contributor to nonattainment.

CITE	BRIEF DESCRIPTION	REASON
WAC 173-400-040(6)	General limit of 1,000 ppmdv SO ₂	SO ₂ standards for emissions units at kraft pulping mills in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-040(8)(b)	Sources of fugitive dust identified as significant contributors to a PM-10 nonattainment area must use RACT to control fugitive dust emissions.	Facility was not listed as an Industrial Fugitive Source of PM-10 in the SIP for PM in the Tacoma Tideflats, Nov. 1991.
WAC 173-400-050(1)	No particulate emissions in excess of 0.2 grain/dscf from combustion units.	Particulate standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-050(1)	No particulate emissions in excess of 0.1 grain/dscf from units combusting wood derived fuels for production of steam.	Particulate standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-070(2)(a)	Hog fuel boilers must meet all requirements of WAC 173-400-040 & -050(1), with exceptions.	Specific emission standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-100 Registration	Registration required for listed sources, excluding sources subject to the operating permit program, after EPA grants interim or final approval to the state program.	Facility is subject to the operating permit program; EPA has granted interim approval for the state program.
WAC 173-400-105(5)(a)	Continuous opacity & SO ₂ monitoring & recording required for fossil fuel-fired steam generators that are not subject to an NSPS, except where capacity is < 250 million BTU/hr heat input or where there is an annual avg. capacity factor of ≥ 30%	#7 Power Boiler is subject to an NSPS; #6 Power Boiler has a heat input capacity of < 250 million BTU/hr.
WAC 173-400-105(5)(d)	Continuous opacity monitoring & recording required for wood residue fuel-fired steam generators w/ capacity of ≥ 100 million BTU/hr heat input that are not subject to an NSPS	#7 Power Boiler is subject to an NSPS; #6 Power Boiler does not fire wood residue fuel.
WAC 173-400-105(6)	Applies to sources that are not subject to operating permit program.	Facility is subject to the operating permit program.
WAC 173-400-151 Retrofit requirements for visibility protection	BART required for sources to which significant visibility impairment of a Class 1 area is reasonably attributable.	Facility has not been identified as a source impacting a Class I area.
WAC 173-400-210 Emission requirements of prior jurisdictions	Requires adherence to emission limitations if more restrictive than those of current authority.	PSAPCA particulate limitations applicable to #6 Power Boiler were not more restrictive than Ecology particulate limitations.
WAC 173-405-040(7) [STATE ONLY, NOT FEDERALLY ENFORCEABLE]	Continuously employ best practicable operation and maintenance procedures for recovery furnaces or lime kilns with an alternative opacity limit.	Facility does not have any alternative opacity limits.
WAC 173-405-077	Provisions of WAC 173-400-105(5) (Report of startup, shutdown, etc.) apply.	Old WAC 173-400-105(5) has been deleted from state regulations and the SIP.
Chapter 173-410 WAC; Sulfite Pulping Mills		Facility is not a sulfite pulping mill

CITE	BRIEF DESCRIPTION	REASON
Chapter 173-433 WAC; Solid Fuel Burning Devices	Applies to wood stoves and fireplaces.	Facility does not operate such devices
WAC 173-435-040(1)	Major source, when requested in writing by Ecology must prepare a Source Emission Reduction Plan (SERP) for reducing emissions during ambient air pollution episodes	Facility has not been requested by Ecology to prepare a SERP
WAC 173-435-050(2)	No open fires during an air pollution episode	Facility does not conduct open burning.
WAC 173-435-060(5)	Cannot refuse entry or access to appropriate enforcement personnel determining compliance with a SERP	Facility is not required to have a SERP
Chapters 173-470, 474, 475, 480, 481 WAC; Ambient Air Quality Standards		WAC 173-401-200(4)(xii) states that AAQS apply to only temporary sources
Chapter 173-490 WAC; Emission Standards and Controls for Sources of VOCs		Applies only to facility types specified in the regulation; pulp and paper mills are not specified

Appendix B - Continuous Monitoring Recovery Requirements

1. CMS Data Recovery. State and federal regulations recognize that monitoring data may be lost for legitimate reasons. The permittee may be exempted from monitoring and reporting requirements during periods of monitoring system malfunctions, provided that the permittee shows that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [40 CFR §60.13(e); 40 CFR 63.8(c)(4); WAC 173-400-105(5)(h); WAC 173-405-077]

The permittee shall make every effort to acquire, maintain, and recover valid monitoring data. CMS downtime and resulting monitoring data loss due to malfunctions shall be less than 10% of the monthly unit operating time. An acceptable explanation for the loss of monitoring data must be provided in the monthly report. Periods when CMS data is not recovered due to daily calibration, zero and span checks are not considered nor reported as CMS downtime in the monthly report. Records of daily calibration, zero and span checks shall be kept for a period of five years and made available upon request to Ecology. [WAC 173-401-615(1)(c); WAC 173-401-630(1)]

2. MACT CMS Performance Reports. The permittee shall record and report CMS downtime in the semi-annual MACT report. [40 CFR 63.10(e)]
3. NSPS CMS Performance Reports. The permittee shall record and report CMS downtime in the **monthly** report. [40 CFR §60.7(c) and (d) (2/12/99)]
4. WA PSD/NSR/SIP CMS Performance Reports. The permittee shall record and report CMS downtime, other than calibration, zero and span checks, in the monthly report. In the case of monitor downtime due to system malfunctions, the report will address whether the malfunction was unavoidable, and repaired as expeditiously as practicable. [WAC 173-400-105(5)(h); WAC 173-405-077; WAC 173-401-615(1)(c); WAC 173-401-630(1)]

Appendix C - PM-10 Calculations

Calculation procedures for determining compliance with the daily PM-10 limit on industrial stack sources at the facility (from Order DE 95AQ-I006).

1. Use the following procedures to determine whether the industrial stack sources are in compliance with the 1671 kg/day PM-10 limit on a daily basis. Calculate kilograms per day of PM-10 using the procedures described below.
 - a. For determining daily PM-10 emissions from an emission unit for the day upon which a total suspended particulate (TSP) emission test is conducted at that unit, use:
 - i. the results of the source test for that unit;
 - ii. the associated throughput parameters (1.c.) for the test; and
 - iii. the PM-10 ratio as measured during the test, or if not measured during that test, then as specified in 1.d. below.
 - b. For determining daily PM-10 emissions from an emission unit for a day upon which no emission test is conducted at that unit, utilize a parametric factor that correlates mass of PM-10 emitted to throughput, developed as follows. Use:
 - i. the most recent total suspended particulate (TSP) emission test data available and following Department of Ecology guidance regarding requirements for a representative test;
 - ii. the associated throughput parameters (1.c.) for that test; and
 - iii. Kilograms per day of PM-10 as specified in 1.d. below.
 - c. The throughput parameters utilized shall be as follows: gallons per day of black liquor ("BL") fired for Recovery Furnace No. 3, Recovery Furnace No. 4, and Smelt Tanks Nos. 3, 4E & 4W; gallons per day of lime mud ("LM") fed for Lime Kilns Nos. 1 and 2; and pounds of steam produced per day for Power Boiler No. 6 and Power Boiler No. 7.
 - d.
 - i. The following ratios developed from source test data, shall be used to determine the PM₁₀ component of TSP emissions from each source: Recovery Furnace No. 3, 0.74; Recovery Furnace No. 4, 0.56; Lime Kiln No. 1, 0.96; Lime Kiln No. 2, 0.96; Smelt Tank No. 3, 0.90; Smelt Tank No. 4E, 0.90; Smelt Tank No. 4W, 0.90; Power Boiler No. 6, 0.75; Power Boiler No. 7, 1.0. If a more accurate ratio for any of these units is determined by source test and approved by Department of Ecology, it can be substituted without amending this order.

- ii. For the Recovery Furnaces, Smelt Tanks and Lime Kilns, the parametric factor shall be calculated, using the most recent source test data available, as follows:

$$\frac{\text{lbs TSP}^*}{\text{day}} \times \frac{1}{\text{gpm}} \times \frac{0.4536}{1440} \times \text{PM}_{10} \text{ ratio} = \frac{\text{PM}_{10} \text{ kg/day}}{\text{gal/day BL or LM}}$$

For the Power Boilers, the parametric factor shall be calculated as follows:

$$\frac{\text{lbs TSP}^*}{\text{day}} \times \frac{1}{10^3 \text{ lbs}} \times 0.4536 \times \text{PM}_{10} \text{ ratio} = \frac{\text{PM}_{10} \text{ kg/day}}{10^3 \text{ lbs steam/day}}$$

* lbs. TSP/hour during the source test times 24 hours per day.

- iii. The kg/day of PM-10 for each industrial stack source shall be calculated by multiplying the parametric factor times the following daily variables: gallons of black liquor per day for Recovery Furnace and Smelt Tank vent No. 3; gallons of black liquor per day for Recovery Furnace No. 4 and Smelt Tank vents 4E and 4W; gallons of lime mud per day for Lime Kilns Nos. 1 and 2; and 10³ pounds of steam produced per day for Power Boiler No. 6 and Power Boiler No. 7.
- iv. The total PM-10 in kg/day for all industrial stack sources at the Mill shall be calculated by adding together the kg/day of PM-10 for each industrial stack source as calculated pursuant to 1.a. and 1.b. above.

2. Monitoring, recordkeeping and reporting.

- a. The test method shall be Department of Ecology Method 5 for all units, except that Department of Ecology Method 8 shall be used for Smelt Tanks Nos. 3, 4E & 4W, and may be used as an alternate for Lime Kilns Nos. 1 and 2.
- b. Reporting frequency shall be monthly for all units. Monthly reports shall report daily cumulative PM₁₀ emissions from industrial stack sources at Simpson in terms of kg/day, as calculated pursuant to Section 1 of this Appendix.
- c. Records of the calculations required by this Order, including specified parameter rates, shall be maintained and made available for inspection upon request. Records required by this Order shall be retained for a period of at least five years from the date of the calculation.

APPENDIX D - #2 Lime Kiln TRS and SO₂ Method

Simpson Tacoma Kraft Co. #2 Lime Kiln Continuous TRS Emissions Monitoring System

Test Equipment

Barton coulometric titrator and gas conditioning train as described in NCASI Technical Bulletin AQTB-089 (January 1977).
Continuous data recorder.

Quality Control/Assurance

The monitoring system is serviced and calibrated weekly. Calibrations are also done when the process operator has reason to suspect that the instrument is not responding correctly.

Prior to calibration, the titrator apparatus is first serviced by changing the desiccant, filters, SO₂ scrubber solution and cell solution. A cell driven in a 50% solution of HBr for 20 minutes is installed in the cell housing. A single point calibration with atmosphere blank is then performed.

Calibration Equipment:

One cal gas cylinder of a concentration \approx 20 ppm as H₂S
Gas regulator
Teflon tubing with "T"

Cell Calibration:

1. **Zero.** A baseline blank is established by allowing ambient atmosphere to enter directly into the cell. The baseline is observed for 5 minutes and if stable, calibration is initiated.
2. **Span.** Calibration gas is introduced at the disconnected stack fitting at a rate of approximately 300 cc/min. A "T" is installed inline at the regulator to allow an excess of cal gas (\approx 50ml/min) to escape to atmosphere. A volume of 250 cc/min is regulated downstream of the cell with the needle valve. The span peak is observed for a minimum of 15 minutes. After the deflection peak has stabilized (typically between 15 and 25 minutes) cal gas is removed, plumbing is reinstalled for gas sampling.
3. New calibration factor is applied to the data recording system.
4. Calibration data are recorded on the calibration log sheet.

Simpson Tacoma Kraft Company
#2 Lime Kiln SO₂ Source Test Method

Test Equipment

Same as described for #2 Lime Kiln Continuous TRS Emissions Monitoring System, except the SO₂ scrubber is removed from the sample conditioning train. As a consequence, this Method measures combined TRS and SO₂.

Quality Control/Assurance

Same as described for #2 Lime Kiln Continuous TRS Emissions Monitoring System, with the following exception:

Calibration span gas is ≈ 40 ppm as SO₂.

Calibration is done immediately prior to one hour source tests, which are normally done monthly.

APPENDIX E - Definitions of Abbreviations Used in Permit

ADMT	air dry metric ton
avg	average
BACT	Best available control technology
BART	Best available reasonable technology
BDMT	bone dry metric ton
BL	black liquor
BLS	black liquor solids
BTU	British thermal unit
CEM	continuous emission monitor
CFR	Code of Federal Regulations
CO	carbon monoxide
DOE	Department of Ecology
dscf	dry standard cubic foot
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
FCAA	Federal Clean Air Act
gpm	gallons per minute
gr	grain
HAP	hazardous air pollutant
HVLC	High volume low concentration
IEU	insignificant emission unit
kg	kilogram
lbs	pounds
LM	lime mud
LVHC	Low volume high concentration
MACT	maximum available control technology
MMBTU	million British thermal units
NOx	oxides of nitrogen
NCG	noncondensable gas
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	new source performance standards
PM	particulate matter
PM-10	particulate matter less than 10 microns in diameter
ppm	parts per million
ppmdv	part per million dry volume
RACT	Reasonable available control technology
SERP	source emission reduction plan
SIP	state implementation plan
SO2	sulfur dioxide
tpy	tons per year
TRS	total reduced sulfur
TSP	total suspended particulate
U.S.C.	United States Code
VOC	volatile organic compound
WAC	Washington Administrative Code

APPENDIX F - Existing Orders and Permits

Order No. DE 1916-AQ05

Order No. DE 01AQIS-3114

Order No. DE 99AQIS-94

Amendment 1 to Order No. DE 97AQ-I004

Amendment of Order No. DE 97AQ-I004

Order No. DE 97AQ-I004

Agreed Order No. DE 95-AQI006